

Listing of Claims:

1. (Currently Amended) A method for generating a persistent storage system, the method comprising the steps of:

receiving as input an entity definition of a persistent storage structure, wherein the entity definition comprises a declaration of an object, one or more properties of the object, and a data type for each property;

parsing the entity definition to determine logical structures and properties for declared entities;

automatically generating-a the persistent storage structure in a persistent storage medium based on the determined logical structures and properties of the declared entities;

and automatically generating an interface for the persistent storage structure, wherein the interface comprises entity classes that are automatically generated to enable access to entity instances in the persistent storage structure.

2. (Canceled)

3. (Original) The method of claim 1, wherein the persistent storage structure comprises a database table.

4. (Original) The method of claim 1, wherein the persistent storage structure comprises a file directory.

5. (Original) The method of claim 1, wherein the persistent storage medium comprises a hard disk, a readable/writeable CD or a floppy disk.

6. (Original) The method of claim 1, wherein the method is implemented in a database system.

7. (Original) The method of claim 6, wherein the database system is a relational database.

8. (Original) The method of claim 1, wherein the step of automatically generating an interface for accessing the persistent storage medium comprises automatically creating methods for one of storing, retrieving, searching, and removing entity instance data in the persistent storage medium.

9. (Original) The method of claim 1, further comprising the step of automatically generating an index to persistent stored data.

10. (Original) The method of claim 1, wherein the step of automatically generating an index to persistent stored data comprises generating an index to persistent stored data that is frequently accessed as determined by a predefined indicator.

11. (Currently Amended) The method of claim 1, further comprising the step of automatically adapting the persistent storage structure or the access interface for a new entity definition.

12. (Original) The method of claim 1, further comprising the step of automatically optimizing the persistent storage system to improve search efficiency or storage scalability.

13. (Original) The method of claim 1, further comprising automatically creating a cache memory for storing an entity instance that is accessed from the persistent storage medium.

14. (Original) The method of claim 1, further comprising the steps of:
receiving an entity instance declaration; and
automatically populating the persistent storage structure with entity instance data.

15. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for generating a persistent storage system, the method comprising the steps of:

receiving as input an entity definition of a persistence storage structure, wherein the entity definition comprises a declaration of an object, one or more properties of the object, and a data type for each property;

parsing the entity definition to determine logical structures and properties for declared entities;

automatically generating a the persistent storage structure in a persistent storage medium based on the determined logical structures and properties of the declared entities;
and automatically generating an interface for the persistent storage structure, wherein the interface comprises entity classes that are automatically generated to enable access to entity instances in the persistent storage structure.

16. (Currently Amended)

17. (Original) The program storage device of claim 15, wherein the persistent storage structure comprises a database table.

18. (Original) The program storage device of claim 15, wherein the persistent storage structure comprises a file directory.

19. (Original) The program storage device of claim 15, wherein the instructions for automatically generating an interface for accessing the persistent storage medium comprise instructions for automatically creating methods for one of storing, retrieving, searching, and removing entity instance data in the persistent storage medium.

20. (Original) The program storage device of claim 15, further comprising instructions for automatically generating an index to persistent stored data.

21. (Original) The program storage device of claim 20, wherein the instructions for automatically generating an index to persistent stored data comprise instructions for generating an index to persistent stored data that is frequently accessed as determined by a predefined indicator.

22. (Original) The program storage device of claim 15, further comprising instructions for automatically adapting the persistent storage structure or the access interface for a new entity definition.

23. (Original) The program storage device of claim 15, further comprising instructions for automatically optimizing the persistent storage system to improve search efficiency or storage scalability.

24. (Original) The program storage device of claim 15, further comprising instructions for automatically creating a cache memory for storing an entity instance that is accessed from the persistent storage medium.

25. (Original) The program storage device of claim 15, further comprising instructions for performing the steps of: receiving an entity instance declaration; and automatically populating the persistent storage structure with entity instance data.

26. (Currently Amended) A persistent storage system, comprising:

an interface for receiving an entity definition of a persistent storage structure, the entity definition comprising a declaration of an object, one or more properties of the object, and a data type for each property, and for processing the an entity definition to determine logical structures and properties for declared entities; and

a utility module for automatically configuring an autonomous persistent storage system in accordance with the processed entity definition, wherein the autonomous persistent storage system is automatically configured to comprise: a module for automatically generating a the persistent storage structure in a persistent storage medium based on the determined logical structures and properties of the declared entities; and an access interface comprising entity classes that are automatically generated to provide access methods that enable access to entity instances in the persistent storage structure.

27. (Original) A database system comprising the persistent storage system of claim 26.

28. (Original) An enterprise application comprising the persistent storage system of claim 26.

29. (Original) The system of claim 26, wherein the persistent storage structure comprises a database table.

30. (Original) The system of claim 26, wherein the persistent storage structure

comprises a file directory.

31. (Original) The system of claim 26, wherein the access methods comprise methods for one of storing, retrieving, searching, and removing entity instance data in the persistent storage medium.

32. (Original) The system of claim 26, wherein the autonomous persistent storage system is an electronic catalog system.

33. (Original) The system of claim 26, wherein the autonomous persistent storage system further comprises an index creation module for automatically generating an index to persistent stored data.

34. (Original) The system of claim 26, wherein the autonomous persistent storage system further comprises a cache memory module for automatically storing an entity instance that is accessed from the persistent storage medium.

35. (Original) The system of claim 26, wherein the autonomous persistent storage system further comprises means for automatically populating a persistent storage structure with entity instance data that is input to the system.

36. (Original) An e-service that implements the system of claim 26 for providing a data management service based on a fee agreement or service level agreement.

37. (New) A method for making a computer implemented process to generate a persistent storage system, said method comprising:

instantiating first computer instructions onto a computer readable medium , said first instructions configured to receive as input an entity definition of a persistent storage structure, wherein the entity definition comprises a declaration of an object, one or more properties of the object, and a data type for each property;

instantiating second computer instructions onto a computer readable medium, said second instructions configured to parse the entity definition to determine logical structures and properties for declared entities; and

instantiating third computer instructions onto a computer readable medium said third instructions configured to automatically generate the persistent storage structure in a persistent storage medium based on the determined logical structures and properties of the declared entities; and

instantiating fourth computer instructions onto a computer readable medium, said fourth instructions configured to automatically generate an interface for the persistent storage structure, wherein the interface comprises entity classes that are automatically generated to enable access to entity instances in the persistent storage structure.